Claims

1. A shelter without walls capable of producing electrical energy comprising:

a canopy having a width and a length defining a sheltered area and having a photovoltaic device capable of producing an electrical current when exposed to a light source, said photovoltaic device associated with said canopy to produce electrical current from sunlight;

a supporting structure connected to and supporting said canopy and permitting substantially unobstructed access to the sheltered area; and

an electrical load operatively connected to the photovoltaic device for utilizing the electricity generated by the photovoltaic device when the photovoltaic device is exposed to light.

2. The shelter of claim 1 wherein said photovoltaic device is supported by the canopy.

3. The shelter of claim 1 wherein the photovoltaic device is contained on or in the canopy.

4. The shelter of claim 1 wherein the photovoltaic device forms the canopy.

5. The shelter of claim 1 wherein the photovoltaic device is selected from the group consisting of crystalline photovoltaic systems, flexible thin film photovoltaic systems, stacked photovoltaic layers and photovoltaic and light emissive layers.

6. The shelter of claim 1 further comprising a first photovoltaic device oriented to receive sunlight and a second photovoltaic device directed toward the ground.

7. The shelter of claim 6 wherein said canopy has an upper surface and an underside and an artificial light source is affixed to the underside or dispersed within the device.

8. The shelter of claim 5 wherein said photovoltaic device is transparent.

9. The shelter of claim 8 wherein the transparent photovoltaic device is composed of multiple layers of flexible thin film transparent photovoltaic material.

10. The shelter of claim 1 further comprising a light emitting diode associated with the photovoltaic device.

11. The device of claim 10 wherein the light emitting diode is capable of displaying human readable information.

12. The shelter of claim 10 wherein the light emitting diode is a flexible thin film light emitting diode.

13. The shelter of claim 1 wherein the photovoltaic device further comprises a light emitting coating and the photovoltaic device is capable of generating electricity from the light emitted by the light emitting coating.

14. The shelter of claim 1 wherein the electrical load is selected from the group consisting of the power distribution grid of a utility company and a battery.

15. The shelter of claim 14 wherein said battery is operatively connected to a light which illuminates said sheltered area.

16. A system for generating electricity from a parking lot comprising:

an outdoor parking area having at least one vehicle parking space;

a canopy having a width and a length defining a sheltered area for said parking space and having a photovoltaic device capable of producing an electrical current when exposed to a light source, said photovoltaic device associated with said canopy to produce electrical current from sunlight;

a supporting structure connected to and supporting said canopy and permitting substantially unobstructed access to the sheltered area; and

an electrical load operatively connected to the photovoltaic device for utilizing the electricity generated by the photovoltaic device when the photovoltaic device is exposed to light.

17. A method of producing electricity comprising:

providing a canopy having a width and a length defining a sheltered area and having a photovoltaic device capable of producing an electrical current when exposed to a light source, said photovoltaic device associated with said canopy to produce electrical current from sunlight;

supporting the canopy without walls above an outdoor vehicle parking area with a supporting structure that permits substantially unobstructed access to the parking area;

exposing the photovoltaic device to light to generate electricity; and

connecting an electrical load to the electricity.

18. The method of claim 17 wherein said electrical load is a power meter and the method further comprises reverse metering the power meter.

19. The method of claim 17 wherein said electrical load is a utility company power distribution grid.

20. The method of claim 17 further comprising producing electricity at night with a light emissive material operatively associated with the photovoltaic device dispersed within or placed in the (PV) roof's vicinity.